



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,986	10/02/2003	Anthony D. Kurtz	Kulite-92	9059
7590		03/24/2005	EXAMINER	
Plevy & Howard		ELLINGTON, ALANDRA		
600 North Easton Road		ART UNIT		
Willow Grove, PA 19090		PAPER NUMBER		
		2855		

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/677,986

Applicant(s)

KURTZ ET AL.

Examiner

Alandra Ellington

Art Unit

2855

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 12 is/are rejected.
- 7) ☒ Claim(s) 9-11 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/02/03</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Bock et al (4,966,034) (hereinafter Bock).

a. With respect to Claim 1, Bock discloses an electronic switch comprising an impedance having one terminal connected to an output terminal of said bridge 1, switching means 7 coupled to said other terminal of said impedance to enable said impedance to selectively shunt said bridge 1 to force said bridge 1 to provide an output indicative of said dangerous condition when said switching means is operated in a first state and to effectively isolate said impedance from said bridge 1 when said switching means is operated in a second state (col. 4 lines 61-67, col. 5 lines 19-68, col. 6 lines 41-45, col. 7 lines 48-59, col. 8 lines 32-41 {Fig. 4}).

b. With respect to Claim 4, Bock discloses the electronic switch according to claim 1 wherein said impedance is a resistor (col. 6 lines 42-45).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2855

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bock (4,966,034).

a. With respect to Claim 5, Bock discloses the claimed invention except for specifically teaching a lamp. However, Bock does disclose a way of warning the operator in case of a dangerous situation (col. 9 lines 17-23). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Bock to include a lamp for the purpose of providing an alternate way of signaling the operator in case of an emergency or potential error in the vehicle (col. 9 lines 17-23).

5. Claims 2,3,6-8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bock et al (4,966,034) in view Mireles et al (6,640,644) (hereinafter Mireles).

a. With respect to Claim 2, Bock discloses the claimed invention except for specifically teaching a Wheatstone bridge. Mireles teaches an electronic switch with a Wheatstone bridge (col. 6 lines 1-7 {Fig. 3}). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Bock with the teachings of Mireles to include a Wheatstone bridge for the purpose of indicating the tilt amount of the membrane and vibration of the

automobile caused by its engine running (see Mireles, col. 3 lines 12-34,59-64, col. 6 lines 1-7 {Fig. 3}).

b. With respect to Claim 3, Mireles teaches a Wheatstone bridge includes at least one piezoresistor 12,14 (col. 6 lines 39-41 {Fig. 3}).

c. With respect to Claim 6, Bock discloses the electronic switch apparatus, comprising a bridge circuit 1 responsive to applied pressure to provide at an output a voltage proportional to applied pressures, a control circuit 4 coupled to said bridge 1 for receiving said output voltage and for providing an indication when said voltage exceeds a predetermined value indicative of an improper pressure, switching means 7 responsive to said provided indication to operate an indicator capable of notifying a user of said improper pressures, an impedance having a first terminal coupled to an output of said bridge 1 and a second terminal, a selectively operated switch 7 having one terminal coupled to said second terminal of said impedance with said other terminal coupled to a point of reference potential (col. 4 lines 61-67,col. 5 lines 19-68, col. 6 lines 41-45, col. 7 lines 48-59, col. 8 lines 32-41 {Fig. 4}). Mireles teaches switch when selectively operated in a first position causing said impedance to shunt said bridge to cause said bridge to provide a voltage indicative of said improper pressure during the absence of any applied pressure to said bridge and operative on a second resistor to isolate said resistor from said bridge whereby a user can determine whether said switch will be operative upon application of an applied pressure (col. 6 lines 1-7,32,-43 {Fig. 3}).

- d. With respect to Claim 7, Mireles teaches a bridge is a piezoresistive bridge 12,14 (col. 6 lines 1-7,32-43 {Fig. 3}).
- f. With respect to Claim 8, Mireles teaches the impedance is a resistor selected in magnitude to shunt the bridge to enable the bridge to provide a voltage indicative of the improper pressure (col. 6 lines 1-43 {Fig. 3}).
- e. With respect to Claim 12, Mireles teaches a piezoresistive Wheatstone bridge (col. 6 lines 1-7,32-43 {Fig. 3}).

Allowable Subject Matter

- 6. Claims 9-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 7. The following is a statement of reasons for the indication of allowable subject matter: The reasons for the indication of allowable subject matter are based on the inclusion of:

- a. In Claim 9, a switching means includes a transistor having a control electrode coupled to the control circuit and responsive to the provided indication to turn on the transistor having first and second output electrode with one output electrode coupled to a pair of reference potential.

Conclusion

- 8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(5,253,532) (6,529,847) (4,233,848) (4,667,516)

Art Unit: 2855

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alandra Ellington whose telephone number is (571) 272-2178. The examiner can normally be reached on Monday - Friday, 7:30am - 4:00pm.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (571) 272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alandra Ellington
Art Unit 2855



ane



**HARSHAD PATEL
PRIMARY EXAMINER**